

Polarity and Conformation of Phospha- λ 5-azenes in Solutions

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Abstract

Conformations of a series of phosphazenes $\text{Ph}_3\text{C}=\text{N}-\text{C}_6\text{H}_4-\text{X}-\text{o}$ in solutions, determined by method of dipole moments and IR spectroscopy, are considered. The derivatives possessing alkyl substituents exist in bisector conformations with the rotation angle of aromatic fragment relative to $\text{N}-\text{Csp}^2$ $-30^\circ < \varphi < 30^\circ$. The alkoxy substituted derivatives have the rotation angle φ 90° .
